Appl. No. 10/046,131
Response Dated May 7, 2010
Reply to Office Action of November 12, 2009

Docket No.: 188880.01
Examiner: Lerner, Martin
TC/A.U. 2626

REMARKS

Summary

Claims 1 and 3-52 are pending in this application. Claims 53-56 have been

withdrawn from consideration. Favorable reconsideration and allowance of the pending

claims are requested.

Although Applicant disagrees with the broad grounds of rejection set forth in the

Office Action, Applicant has amended independent claims 1 and 12, and dependent

claims 3 and 4, in order to facilitate prosecution on the merits. With respect to

independent claim 1, Applicant has cancelled dependent claim 2 without prejudice or

disclaimer, and has incorporated its subject matter into independent claim 1. Independent

claim 12 has been amended to overcome § 112 rejections. As such, no new matter has

been added.

Claim Rejections – 35 U.S.C. § 112

Claims 1-22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to

comply with the written description requirement. Applicant respectfully traverses this

rejection.

Applicant respectfully submits that the term "modality dependent" as recited in

claims 1-22 meets the written description requirement of 35 U.S.C. § 112, first paragraph.

It is well-established that the Examiner has an initial burden to present by a

preponderance of evidence why a person of ordinary skill in the art would not recognize

in an applicant's disclosure a description of the invention defined in the claims. In re

Wertheim, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976). According to the

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Examiner, claims 1-22 do not provide adequate written description because the term

"modality dependent" does not appear in the Specification. However, the term "modality

dependent" does not need to be described literally in the Specification. *See, e.g.*, MPEP §

2163.02. Therefore the mere absence of the specific words "modality dependent" in the

Specification does not <u>by itself</u> support the rejection made under § 112, first paragraph.

As the Examiner provides no other support for this rejection, Applicant respectfully

submits that the Examiner has failed to meet his initial burden of proof.

Despite this deficiency, Applicant has previously submitted numerous reasons

why the term "modality dependent" is adequately supported by the Specification. For

example, as previously submitted with the Response dated October 19, 2009, a person

skilled in the art would interpret "modality dependent attribute" to mean use of an

attribute depends on a specific modality, such as a visual modality or an audible

modality.

As such, Applicant respectfully requests removal of the rejection made under §

112, first paragraph. If for some reason the Examiner maintains the rejection made under

§ 112, first paragraph, Applicant respectfully requests a new non-final office action

providing a specific line of reasoning as to why the term "modality dependent" is not

supported by the Specification beyond mere absence of the words "modality dependent."

Claims 1-22 were rejected under 35 U.S.C. § 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which Applicants regard as the invention. Although Applicant disagrees with the broad

grounds of rejection set forth in the Office Action, Applicant has amended independent

claims 1 and 12 in order to facilitate prosecution on the merits. These claims have been

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amended in accordance with the Office Action, and removal of this rejection is

respectfully requested. Applicant further submits that the above amendments are made to

overcome § 112 rejections and are not made to overcome the cited references.

Accordingly, these amendments should not be construed in a limiting manner.

Claim Rejections - 35 U.S.C. § 103

Claims 1-2 and 4-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable

over United States Patent No. 7,020,841 to Dantzig (hereinafter "Dantzig") in view of

United States Patent No. 6,839,896 to Coffman (hereinafter "Coffman"). Claims 3 and 9-

11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dantzig and

Coffman in further view of United States Patent No. 6,269,336 to Ladd (hereinafter

"Ladd"). Claims 12-46 and 52 stand rejected under 35 U.S.C. § 103(a) as being

unpatentable over Dantzig in view of Ladd. Claims 47-51 stand rejected under 35 U.S.C.

§ 103(a) as being unpatentable over Dantzig in view of Ladd and in further view of *W3C*

Working Draft ("Grammar Representation Requirements for Voice Markup

Languages"). Applicants respectfully traverse the rejections, and requests

reconsideration and withdrawal of the obviousness rejections.

Applicant has cancelled dependent claim 2 and has incorporated its subject matter

into independent claim 1. Therefore, the obviousness rejection with respect to claim 2

will be addressed below with respect to amended claim 1.

Applicant submits that the cited references, taken alone or in combination, fail to

teach each and every element recited in claims 1 and 3-52 and thus they define over the

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cited references. For example, with respect to amended claim 1, the cited references fail

to teach at least the following language:

> a set of controls defined in an authoring page for a website
> for defining visual renderings and at least one of
> recognition and audible prompting on a client in a
> server/client system, each control having a first set of
> attributes related to visual rendering and a second set of
> attributes related to at least one of recognition and audibly
> prompting, wherein one of the second set of attributes for
> one of the controls relates to a grammar to use for
> recognition, the controls being related to client side markup
> executable by a client browser;

> a module operable on a computer, the module being
> configured to receive the authoring page, and wherein the
> module is further configured to generate, using modality
> dependent attributes provided from the controls on the
> authoring page, client side markup executable by the client
> browser on the client in the server/client system in
> accordance with the controls and the attributes of the
> controls to perform both visual rendering and at least one of
> recognition and audibly prompting.

According to the Office Action, Dantzig and Coffman in combination disclose the above-

recited language. This assertion is respectfully traversed.

Applicant respectfully submits that claim 1 defines over Dantzig because Dantzig

fails to disclose, teach or suggest at least "modality dependent attributes." As correctly

stated in the Office Action, Dantzig fails to disclose "modality dependent attributes."

Office Action, Page 6. Consequently, Dantzig fails to disclose, teach or suggest at least

the above-recited language of claim 1.

Applicant respectfully submits that claim 1 also defines over Dantzig because

Dantzig fails to disclose, teach or suggest at least "each control having a first set of

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attributes related to visual rendering and a second set of attributes related to at least one

of recognition and audibly prompting." According to the Office Action, the Examiner

interprets the term "authoring page" to read on the IML script 32. Office Action, Page 6.

However, Dantzig repeatedly describes the "IML script 32" as a "modality-independent

markup script" that is converted into a plurality of modalities (e.g., speech and GUI).

See, e.g., Dantzig, Col. 1: Lines 19-25, Col. 2: Lines 45-50, Col. 5: Lines 35-38 and 50-

56. For instance, the IML script 32 may include conversational gestures that are

modality-independent building blocks that can be combined to represent any type of

intent-based user interaction. Dantzig, Col. 5: Lines 63-65. An example of a

conversational gesture includes a conversational gesture message used to convey

information messages to the user, which may be rendered as a displayed string or a

spoken prompt. Dantzig, Col. 6: Lines 4-8. As such, a "modality-independent markup

script" comprising conversational gestures that are modality-independent building blocks

by definition does not include any attributes or properties relating to a specific modality,

either visual or audible. For instance, attributes for the conversational gesture message

would <u>not</u> include any attributes for an information message to be rendered as a displayed

string or a spoken prompt. Rather, logic whether to render the information message as a

displayed string or a spoken prompt would be implemented by a set of transformation

rules used by a transcoder 30 which transcodes the IML script 32 into a particular set of

markup, such as HTML or VoiceXML. *See, e.g.,* Dantzig, Col. 8: Lines 43-54 and Col.

9: Lines 31-39.

  This distinction is further reinforced by specific examples for the IML script 32

given by Dantzig. One example of IML script 32 is described as high-level XML-based

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script as described in U.S. Serial No. 09/544,823 issued as United States Patent No.

7,685,252 (hereinafter "Maes"), which was incorporated by reference. Maes at column

16, lines 45-60, describes a Conversational Markup Language (CML) having a set of

CML attributes, as follows:

> CML instances can have the following XML attributes. Unless stated otherwise, all attributes are optional.

> (ii) title--Human-readable metadata string specifying a title for the CML instance.

> (iii) name--Name used to establish a namespace for all field values instantiated within the CML instance. This attribute is required for CML instances that are intended to be reusable.

> (iv) action--Specifies the URL (Uniform Resource Locator) that is the target action of the CML instance.

> (v) style--URI of associated XSL style sheet. Unless specified, the CML interpreter defaults to a generic style sheet for transforming the modality-independent CML instance into modality-specific encodings. Attribute style allows CML creators to override or specialize system-wide style rules.

Each of these CML attributes is modality-independent in that they are not specific to a

certain type of modality. For example, the CML attribute of "title" may be assigned a

metadata string specifying a title for the CML instance. The CML title attribute is

modality-independent, and does not represent an attribute or property of the CML

instance for a particular modality used to render the metadata string. This is a decision

left to the transcoder 30. In fact, that is the entire purpose of IML and CML as taught by

Dantzig and Maes, so that a single set of the IML and CML elements may be transcoded

into a specific markup language of a given modality, such as HTML for visual and

VoiceXML for speech. By way of contrast, claim 1 recites "each control having a first

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set of attributes related to visual rendering and a second set of attributes related to at least

one of recognition and audibly prompting." A module may then use the first and second

attributes of a control to emit or generate specific client side markup. Consequently,

Dantzig fails to disclose, teach or suggest at least the above-recited language of claim 1.

The above notwithstanding, Applicant has amended claim 1 to further recite

"wherein one of the second set of attributes for one of the controls relates to a grammar to

use for recognition." As Dantzig fails to describe the first and second attributes as discussed

above, if follows a fortiori that Dantzig fails to describe a specific type of attribute for "a

location of grammar for use in recognition." This is explicitly evidenced by the grammar

description in Dantzig. According to the Office Action, "Dantzig et al. discloses that

controls relate to grammars for speech recognition (column 9, lines 31-39; column 16, lines

6 to 30)." Office Action, Page 7. Dantzig at column 9, lines 31-39, recites in full:

> Furthermore, the Transcoder 30 provides tools to enable application developers to
> build specific grammars which, in a preferred embodiment, are formatted
> according to the JSGF (Java Speech Grammar Format). These grammars correlate
> specified utterances to specified values. Grammar generation tools 36 may be
> executed before presentation of the application to the user, or may be executed
> dynamically during the presentation of the application to the user.

The above-recited language clearly indicates that the grammar is provided by the transcoder

30. As such, the grammar is not provided by attributes for any elements of the IML script

32. Dantzig mentions that "[f]or each IML component that describes an input area, a

grammar rule is defined as part of the system initialization." Dantzig Col. 16: Lines 14-16.

However, none of the cited portions of Dantzig describe that the grammar rules are derived

from any attributes for any elements of the IML script 32, and further, that any attributes for

any elements of the IML script 32 specifically "relates to a grammar to use for recognition."

Consequently, Dantzig fails to disclose, teach or suggest at least the above-recited

language of claim 1.

The Office Action attempts to remedy some of the deficiencies of Dantzig by

stating that Coffman discloses "modality dependent attributes" at Col. 4: Lines 17-23,

Col. 5: Line 59 to Col. 6: Line 3, and Figure 2. More particularly, the Office Action

states that Coffman at the given cites "teaches a system and method for providing dialog

management in a multi-modal environment, where an input/output (I/O) application

program interface (API) 18 provides device abstractions modality-dependent presentation

based on an I/O modality or modalities being utilized." Office Action, Page 7. Coffman

at the given cite of Col. 5: Line 59 to Col. 6: Line 3 recites the following, in full:

> The system comprises a CVM 14 that comprises a plurality of external interfaces.
> The external interfaces comprise a DMAF 16 which provides an interface to
> conversational applications 15 and conversational application developers. In
> addition, an I/O interface 18 provides an interface to conventional I/O devices 17
> comprising, for example, a keyboard, mouse, touch screen, keypad, audio
> subsystem for capturing speech I/O (audio in/audio out), etc. The I/O API 18
> provides device abstractions, I/O abstractions and UI abstractions and provides
> modality-dependent presentation based on the I/O modality or modalities being
> utilized. Preferred embodiments of an I/O manager are described below.

Although unclear, it appears the Office Action is attempting to interpret "modality

dependent attributes" to read on the I/O API 18. As recited above, the I/O API 18

provides device abstractions, I/O abstractions and UI abstractions and provides modality-

dependent presentation based on the I/O modality or modalities being utilized. This

represents the entirety of the description for I/O API 18 since Coffman fails to mention

the I/O API 18 anywhere else in the entire document. From this limited description, it

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appears the I/O API 18 merely provides a conventional I/O interface for the I/O devices 17 providing different I/O modalities. By way of contrast, the "modality dependent attributes" as recited in claim 1 explicitly refer to attributes for "a set of multimodal controls defined on an authoring page for a website for defining visual renderings and at least one of recognition and audible prompting on a client in a server/client system." There is no description in Coffman that the I/O API 18 is any part of any type of authoring page. In fact, there is no description in Coffman that the I/O API 18 even interacts with the conversational applications 15, let alone an authoring page as expressly recited in claim 1. Furthermore, there is no description in Coffman of the I/O API 18 is a control of any sort on any authoring page. In addition, there is no description in Coffman of the I/O API 18 being an attribute for a control on an authoring page. Therefore, it follows *a fortiori* that Coffman fails to describe the I/O API 18 being a "modality dependent attribute" for a control on an authoring page. Rather, the I/O API 18 merely allows access to different I/O devices 17.

In addition to the above-discussed deficiencies of Coffman, Applicant maintains the arguments directed to other deficiencies of Coffman in the Response dated September 10, 2009. Applicant reiterates that Coffman fails to disclose that the conversion application 15 is modality dependent as claimed. Rather, the CVR performs the necessary conversions based upon how the CVR is activated. Further, the Coffman patent discloses that the DMAF makes no assumptions on the number, domain, or modality of applications built against it. Coffman, Col. 5: Lines 51-54. Finally, the DMAF is disclosed as providing a bridge between the application and the other components of the CAP to shield application developers from knowledge of the CAF

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components. Coffman, Col. 5: Lines 42-47. As such, the Coffman patent discloses

nothing more than Dantzig. Consequently, the cited references, whether taken alone or in

combination, fail to disclose, teach or suggest every element recited in claim 1.

Applicant notes that the Office Action fails to address any of the arguments

pointing out the deficiencies of Coffman in the Response dated September 10, 2009,

while continuing to maintain the 103 rejection of claim 1 over Dantzig in view of

Coffman. Absence of rebuttal arguments fails to expeditiously provide the information

necessary to resolve issues in a timely manner. *See, e.g.*, The Official Gazette Notice of

November 7, 2003. Further, the absence of rebuttal arguments needlessly encourages

piecemeal prosecution, which is to be avoided as much as possible. *See, e.g.*, MPEP

§707.07(g)).

Absence from the cited references of the above-mentioned claim elements negates

obviousness. Accordingly, Applicant respectfully requests removal of the obviousness

rejection with respect to independent claim 1. Furthermore, Applicant respectfully

requests withdrawal of the obviousness rejection with respect to claims 3-11, which

depend from claim 1, and therefore contain additional features that further distinguish

these claims from the cited references.

Independent claims 12, 23 and 52 recite elements similar to those recited in claim

1. Therefore, Applicant respectfully submits that claims 12, 23 and 52 are not obvious

and are patentable over the cited references for reasons analogous to those presented with

respect to claim 1. Accordingly, Applicant respectfully requests removal of the

obviousness rejection with respect to claims 12, 23 and 52. Furthermore, Applicant

respectfully requests withdrawal of the obviousness rejection with respect to claims 13-

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22 and 24-51 that depend from claims 12 or 23, and therefore contain additional features that further distinguish these claims from the cited references.

Conclusion

It is believed that claims 1 and 3-52 are in condition for allowance. Accordingly, a timely Notice of Allowance to this effect is earnestly solicited.

Applicants do not otherwise concede, however, the correctness of the Office Action's rejection with respect to any of the limitations of the independent claims and dependent claims discussed above. Accordingly, Applicants hereby reserve the right to make additional arguments as may be necessary to further distinguish the claims from the cited references, taken alone or in combination, based on additional features contained in the independent or dependent claims that were not discussed above. A detailed discussion of these differences is believed to be unnecessary at this time in view of the basic differences in the independent claims pointed out above.

Furthermore, in commenting on the references and in order to facilitate a better understanding of the differences that are expressed in the claims, certain details of distinction between the same and the claimed subject matter have been mentioned, even though such distinctions do not appear in all of the claims. It is not intended that by mentioning any such unclaimed distinctions to create any implied limitations in the claims.

The Examiner is invited to contact the undersigned to discuss any matter concerning this application.

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The Office is hereby authorized to charge any additional fees or credit any

overpayments under 37 C.F.R. § 1.16 or § 1.17 to the credit card in the previously filed

credit card authorization form.

Respectfully submitted,

KACVINSKY LLC

/John F. Kacvinsky/

John F. Kacvinsky, Reg. No. 40,040
Under 37 CFR 1.34(a)

Dated: <u>May 7, 2010</u>

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